STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 100
San Luis Obispo, CA 93401

DRAFT TIME SCHEDULE ORDER (TSO) NO. R3-2010-0013

REQUIRING THE CITY OF SAN LUIS OBISPO WATER RECLAMATION FACILITY TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER NO. R3-2002-0043

The California Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board), finds:

1. The City of San Luis Obispo (hereafter Discharger), owns and operates wastewater collection, treatment, and disposal facilities to provide sewerage service to the City of San Luis Obispo, California Polytechnic State University, and the San Luis Obispo County Airport.

2. The Central Coast Water Board adopted waste discharge requirements regulating the discharge of tertiary-treated effluent from the San Luis Obispo Water Reclamation Facility (WRF) to San Luis Obispo Creek. These requirements were issued in Order No. R3-2002-0043, adopted by the Central Coast Water Board on May 31, 2002. Order No. R3-2002-0043 serves as a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA00449224). Effluent is also supplied to various locations within San Luis Obispo for irrigation. The Master Reclamation Requirements Order No. R3-2003-0081 regulates the production and use of recycled water.

3. On March 25, 2005, Central Coast Water Board adopted modifications to Order No. R3-2002-0043, which include the following:

   - Interim effluent limitations for cyanide, bromoform, chlorodibromomethane and dichlorobromomethane;
   - Numeric effluent limitations for selenium;
   - Findings that specify final effluent limitations for cyanide, bromoform, chlorodibromomethane and dichlorobromomethane to be included in the subsequent permit reissuance;
   - Five-year compliance schedule for cyanide, bromoform, chlorodibromomethane and dichlorobromomethane effluent limitations;
   - Special provision requiring submittal of trihalomethane reduction evaluation by November 1, 2005; and
   - Alternative effluent chlorine limitation to accommodate grab sampling and U.S. EPA approved analysis methodology.

4. Modified Order No. R3-2002-0043 prescribes the following effluent limitations for California Toxics Rule (CTR) constituents.

Table 1 – Final Effluent Limitations

Constituents	Units	Monthly Average (30-day)[1]	Instantaneous Maximum
Chlorodibromomethane[2]	µg/L	0.4	0.8
Dichlorodibromomethane[2]	µg/L	0.6	1.1

[1] "30-day average" is the arithmetic mean of daily concentrations over the specified 30-day period. If monitoring results appear to violate 30-day average effluent limitations, but compliance cannot be determined because sampling is too infrequent, sampling frequency shall be increased to validate compliance. To evaluate compliance with a 30-day average, at least four (4) samples must be collected within a 30-day period.
[1] Toxics rule constituent

5. The State Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Plan), provides that where it is infeasible for a discharger to achieve immediate compliance with CTR criteria, or with effluent limitations based on CTR criteria, then the Central Coast Water Board may establish a compliance schedule in an NPDES Permit. If the compliance schedule exceeds one year, then interim limitations must be included in the NPDES permit. According to The Discharger's effluent data chlorodibromomethane and dichlorobromomethane concentrations were greater than CTR criteria. Modified Order No. R3-2002-0043 established a five-year compliance schedule as well as interim limits for the two CTR constituents identified in Finding No. 4 (above). The Discharger is required to comply with the following interim limitations.

Table 2 – Interim Limitations

Constituent	Units	Instantaneous Maximum
Chlorodibromomethane	µg/L	42
Dichlorobromomethane	µg/L	27

Order No. R3-2002-0043 also established the following five-year compliance schedule:

Table 3 – Compliance Schedule

Interim Requirement	Completion date
Send request for environmental and consulting engineer proposals.	November 1, 2005
Initiate design of facility improvements	May 1, 2006
Complete design of facility improvements.	March 1, 2007
Complete CEQA process.	August 1, 2007
Obtain any necessary permits.	November 1, 2007
Issue Notice to Proceed to contractors.	December 1, 2007
Submit construction progress reports.	Quarterly (with self monitoring reports)

Complete construction and commence debugging and startup.	December 1, 2009
Comply with final effluent limitations.	March 1, 2010

6. Treatment facilities include wet-weather flow equalization, screening, grinding, aerated grit removal, primary settling, biofiltration, secondary settling, nitrification using activated sludge, final settling, cooling using evaporative cooling towers, dual media filtration, and chlorination/dechlorination. Solids are thickened in a dissolved air floatation thickener, stabilized in anaerobic digesters and dewatered either by belt presses or drying beds. Stabilized solids are applied to nonfood agricultural crops. The treatment plant's design capacity (average dry weather flow) is 5.2 million gallons per day (mgd).

7. The Discharger submitted an infeasibility analysis and compliance schedule justification study in support of a time schedule order on November 4, 2009. The study includes a data analysis for chlorodibromomethane and dichlorobromomethane from 2002 through 2008, using 77 samples. The analysis indicates that the chlorine disinfection system will not comply with final effluent limitations. According to the study, chlorodibromomethane and dichlorobromomethane yield the following monthly averages.

Table 4 – Monthly Averages

Constituent	Units	Average Monthly
Chlorodibromomethane	µg/L	42.3
Dichlorobromomethane	µg/L	36.1

Additionally, the City requested a time schedule order for chlorodibromomethane and dichlorobromomethane, which would include interim limits similar to those in Table 4 (above) as well as the following compliance schedule:

Table 5 – Proposed Compliance Schedule

Proposed Action	Estimated Time to Complete[1]
Regulatory Strategies	
Identify next steps for regulatory strategy in coordination with Regional Water Board, and develop information to support agreed upon course of action, as necessary.	8 months
Consideration and adoption of agreed upon regulatory strategy by Regional Water Board, if applicable.	6 moths
Consideration and adoption of regulatory strategies by State Water Board.	6 months
Consideration and adoption of regulatory strategies by the Office Administrative Law and/or U.S. Environmental Protection Agency, if applicable.	9 months

WRF Improvements	
Design WRF Improvements	30 months
Request for Bids	36 months
Complete Construction	57 months
Start-up and Evaluation	57 to 60 months
Full Compliance	60 months
Other Actions	
Develop Pollution Prevention Plan	6 months
Implement Pollution Prevention Plan	12 months
Submit Annual Progress Reports	Annually starting 12 months

1 – After the adoption of a TSO.

8. The Discharger conducted a trihalomethane (THM) study that evaluated alternative treatment processes to reduce the generation of chlorodibromomethane and dichlorobromomethane by the disinfection process. The study evaluated the use of chloramination, ultraviolet (UV) disinfection, peracetic acid (PAA), and chlorine dioxide. The study found that chlorine dioxide was the preferred alternative for disinfection. A follow-up pilot study was conducted to evaluate the feasibility of using chlorine dioxide in place of sodium hypochlorite. The results of pilot study are currently draft; however, the study indicates that the use of chlorine dioxide does not yield significant levels of chlorodibromomethane and dichlorobromomethane and that the resultant effluent would meet the final limits. Furthermore, chlorine dioxide is an effective disinfection product and will provide compliance with bacteria standards in the current permit.

9. The Discharger requested that the Water Board adopt a time schedule order for chlorodibromomethane and dichlorobromomethane before March 1, 2010, to protect it from mandatory penalties for violations of discharge limits in Order No. R3-2002-0043, until the WRF upgrade is complete or another regulatory strategy is adopted.

NEED FOR ORDER AND LEGAL BASIS

10. California Water Code Section 13300 authorizes the Central Coast Water Board to establish a time schedule of specific actions the Discharger shall take in order to correct or prevent a violation of requirements.

11. The Central Coast Water Board has delegated to its Executive Officer all powers and duties authorized by California Water Code (CWC) section 13223. This power included the authority to issue a time schedule order pursuant to CWC section 13300.

12. The Discharger cannot achieve immediate compliance with the chlorodibromomethane and dichlorobromomethane effluent limitations in Order No. R3-2002-0043, which are more stringent than those previously imposed. As a result, a discharge of waste from the current facility is taking place which threatens to violate requirements prescribed by the Central Coast Water Board. Therefore, this Order requires the Discharger to undertake actions to comply with final effluent limitations.

13. Violations of the final effluent limits for chlorodibromomethane and dichlorobromomethane are not subject to CWC section 13385 subdivisions (h) and (l) as long as the Discharger complies with all of the requirements of this time schedule order.

14. This time schedule order requires the Discharger to comply with a compliance schedule, which will allow the Discharger to achieve full compliance with chlorodibromomethane and dichlorobromomethane effluent limitations in NPDES Order No. R3-2002-0043.

15. This enforcement action is taken for the protection of the environment and as such is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) in accordance with Section 15321, Chapter 3, Title 14, California Code of Regulations.

IT IS HEREBY ORDERED, that, pursuant to Section 13300 of the California Water Code, San Luis Obispo Water Reclamation Facility (WRF) shall:

1. Comply with the following interim chlorodibromomethane and dichlorobromomethane effluent limitations commencing on the effective date of Time Schedule Order No. R3-2010-0013:

Table 6 –Interim Limits

Constituent	Unit	Instantaneous Maximum
Chlorodibromomethane	µg/L	42
Dichlorobromomethane	µg/L	36

2. Comply with the following compliance schedule commencing on the effective date of Order No. R3-2010-0013:

Table 7 –Compliance Schedule

Proposed Action	Estimated Time to Complete
Regulatory Strategies	
Identify next steps for regulatory strategy in coordination with Regional Water Board, and develop information to support agreed upon course of action, as necessary.	October 27, 2010
Consideration and adoption of agreed upon regulatory strategy by Regional Water Board, if applicable..	August 28, 2010
Consideration and adoption of regulatory strategies by State Water Board.	August 28, 2010
Consideration and adoption of regulatory strategies by the Office Administrative Law and/or U.S. Environmental Protection Agency, if applicable.	November 26, 2010

WRF Improvements	
Design WRF Improvements	August 17, 2012
Request for Bids	February 13, 2013
Complete Construction	November 5, 2014
Start-up and Evaluation	December 20, 2014
Full Compliance	February 3, 2015
Other Actions	
Develop Pollution Prevention Plan	August 28, 2010
Implement Pollution Prevention Plan	February 24, 2011
Submit Annual Progress Reports	Annually starting January 1, 2012

3. Achieve full compliance with the chlorodibromomethane and dichlorobromomethane effluent limitation in NPDES Order No. R3-2010-0013 by March 1, 2015.

4. Submit annual progress reports on efforts towards final effluent compliance. Progress reports shall be submitted January 1 of each year. Progress reports shall include information on the previous reporting year. The first progress report under this time schedule order shall be submitted to the Central Coast Water Board on January 1, 2012.

5. If the Discharger fails to comply with any provisions of this time schedule order, the Executive Officer may issue a complaint for administrative civil liability pursuant to California Water Code section 13323. The Central Coast Water Board may also refer the case to the Attorney General for injunctive and civil monetary remedies, pursuant to California Water Code sections 13331 and 13385.

6. The Discharger shall comply with all provisions of NPDES Order No. R3-2002-0043 that are not in conflict with this Order.

Any person aggrieved by this action of the Central Coast Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of the order, except that if the thirtieth day following the date of the order falls on a Saturday, Sunday, or state holiday, the petition must be received by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

The Executive Officer may modify the time schedule in this Order to permit a specified task or tasks to be completed at later dates if the Discharger demonstrates and the Executive Officer determines that the delay was beyond the reasonable control of the Discharger to avoid.

ORDERED BY_____
Roger W. Briggs, Executive Officer

Date_____

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